

=> d hist full

(FILE 'HOME' ENTERED AT 15:38:23 ON 19 APR 2006)

FILE 'REGISTRY' ENTERED AT 15:38:33 ON 19 APR 2006

L1 1 SEA ABB=ON PLU=ON 156681-44-6/RN
SET LINE 250
SET DETAIL OFF
SET NOTICE 1 DISPLAY
SET LINE LOGIN
SET DETAIL LOGIN
DIS L1 1 SQIDE
SET NOTICE LOGIN DISPLAY

FILE 'BIOSIS, BIOTECHNO, CA, CAPLUS' ENTERED AT 15:40:16 ON 19 APR 2006

FILE 'REGISTRY' ENTERED AT 15:40:24 ON 19 APR 2006

L2 SET SMARTSELECT ON
SEL PLU=ON L1 1- CHEM : 4 TERMS
SET SMARTSELECT OFF

FILE 'BIOSIS, BIOTECHNO, CA, CAPLUS' ENTERED AT 15:40:25 ON 19 APR 2006

L3 392 SEA ABB=ON PLU=ON L2
L4 57 SEA ABB=ON PLU=ON L3 (S) (BILE (3A) ACID OR PHYTANIC OR
PRISTANIC OR TRIMETHYLUNDECANOIC)
L5 27 SEA ABB=ON PLU=ON L4 AND (MEASUR? OR QUANTI? OR ACTIVIT? OR
AMOUNT)
L6 12 DUP REM L5 (15 DUPLICATES REMOVED)
D L6 IBIB ABS 1-12

FILE HOME

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN
RN 156681-44-6 REGISTRY
CN Racemase, α -methylacyl coenzyme A (9CI) (CA INDEX NAME)
OTHER NAMES:
CN α -Methylacyl CoA racemase
CN α -Methylacyl-CoA racemase
CN 2-Methylacyl-CoA racemase
MF Unspecified
CI MAN
SR CA
LC STN Files: BIOSIS, CA, CAPLUS, CIN, EMBASE, TOXCENTER, USPATFULL
DT.CA CAplus document type: Conference; Dissertation; Journal; Patent
RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study);
PREP (Preparation); PRP (Properties); USES (Uses)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological
study); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP
(Properties); USES (Uses)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
99 REFERENCES IN FILE CA (1907 TO DATE)
100 REFERENCES IN FILE CAPLUS (1907 TO DATE)

 PRINT

Mark a special word or phrase in this record:

 Mark!

All organisms
 Homo sapiens
 Mus musculus
 Mycobacterium tuberculosis

Select one or more organisms in this record:

 Rattus norvegicus Submit

EC NUMBER COMMENTARY

5.1.99.4

Pathway KEGG Link

No entries in this field

RECOMMENDED NAME GeneOntology No.

alpha-Methylacyl-CoA racemase 8111

SYSTEMATIC NAME

2-Methylacyl-CoA 2-epimerase

SYNONYMS

ORGANISM COMMENTARY LITERATURE

2-arylpromionyl-CoA epimerase

-

-

2-methylacyl-CoA racemase

-

-

alpha-Methylacyl CoA racemase

-

-

GenBank U89905-derived protein GI2145184

-

-

GenBank U89906-derived protein GI 2145186

-

-

Racemase, alpha-methylacyl coenzyme A

-

-

Racemase, alpha-methylacyl coenzyme A (Mus musculus clone 3)

-

-

Racemase, alpha-methylacyl coenzyme A (Rattus norvegicus clone 11)

-

-

CAS REGISTRY NUMBER COMMENTARY

156681-44-6

197731-71-8 racemase, alpha-methylacyl coenzyme A (Mus musculus clone 3) /genBank U89906-derived protein GI 2145186

197731-72-9 racemase, alpha-methylacyl coenzyme A (Rattus norvegicus clone 11) /genBank U89905-derived protein GI2145184

REACTION COMMENTARY ORGANISM LITERATURE

(2S)-2-Methylacyl-CoA = (2R)-2-methylacyl-CoA



REACTION TYPE ORGANISM COMMENTARY LITERATURE

Racemization

ORGANISM

COMMENTARY LITERATURE

SEQUENCE CODE

<i>Homo sapiens</i>	-	<u>2447</u> , <u>2449</u>	-
<i>Mus musculus</i>	-	<u>2448</u>	-
<i>Mycobacterium tuberculosis</i>	-	<u>649225</u>	-
<i>Rattus norvegicus</i>	-	<u>2446</u> , <u>2447</u> , <u>2448</u> , <u>2449</u> , <u>649732</u>	-

SUBSTRATE	PRODUCT	REACTION DIAGRAM	ORGANISM	COMMENTARY/ Substrate r:=reversible ir:=irreversible	LITERATURE/ Substrate	COMI Product
(S)-2-Methylmyristoyl-CoA	(R)-2-Methylmyristoyl-CoA		<i>Rattus norvegicus</i>	r	<u>2446</u>	
(S)-2-Methyltetradecanoyl-CoA	(R)-2-Methyltetradecanoyl-CoA		<i>Homo sapiens</i>	r	<u>2447</u>	
(S)-Pristanoyl-CoA	(R)-Pristanoyl-CoA		<i>Homo sapiens</i>	-	<u>2447</u>	
(S)-Pristanoyl-CoA	(R)-Pristanoyl-CoA		<i>Rattus norvegicus</i>	r	<u>2446</u>	
(S)-Pristanoyl-CoA	(R)-Pristanoyl-CoA		<i>Rattus norvegicus</i>	r	<u>2447</u>	
(S)-Trihydroxycoprostanoyl-CoA	(R)-Trihydroxycoprostanoyl-CoA		<i>Homo sapiens</i>	-	<u>2447</u>	
(S)-Trihydroxycoprostanoyl-CoA	(R)-Trihydroxycoprostanoyl-CoA		<i>Rattus norvegicus</i>	-	<u>2447</u>	
(S)-Trihydroxycoprostanoyl-CoA	(R)-Trihydroxycoprostanoyl-CoA		<i>Rattus norvegicus</i>	r	<u>2446</u>	
More	?		<i>Homo sapiens</i>	no activity with free fatty acids	<u>2447</u>	
More	?		<i>Mycobacterium tuberculosis</i>	key enzyme in the metabolism of 2-methyl-branched fatty acids	<u>649225</u>	
More	?		<i>Rattus norvegicus</i>	-	<u>2447</u>	
More	?		<i>Rattus norvegicus</i>	enzyme is involved in the alternative pathway of cholesterol side-chain oxidation. The alternative pathway consists of alpha-methylacyl-CoA racemase, and peroxisomal multifunctional enzyme type 1 (peroxisomal multifunctional 2-enoyl-CoA	<u>649732</u>	

More	?		Rattus norvegicus	hydratase/(S)-3-hydroxyacyl-CoA dehydrogenase)
				no activity with 2446 3-methyl-branched or linear-chain acyl-CoAs

NATURAL SUBSTRATES NATURAL PRODUCTS REACTION DIAGRAM ORGANISM COMMENTARY LITERATURE SUBSTRATE (Substrate) COMMENTARY LITERATURE PRODUCT (Product) (I)

No entries in this field

COFACTOR ORGANISM COMMENTARY LITERATURE IMAGE

No entries in this field

METALS and IONS ORGANISM COMMENTARY LITERATURE

No entries in this field

INHIBITORS	ORGANISM	COMMENTARY	LITERATURE	IMAGE
1-Ethyl-3-(3-dimethylaminopropyl)-carbodiimide	Rattus norvegicus	-	2446	
2-(4-Isobutylphenyl)propionic acid	Homo sapiens	-	2447	
2-(4-Isobutylphenyl)propionic acid	Rattus norvegicus	-	2447	
2-(4-Isobutylphenyl)propionic acid	Rattus norvegicus	i.e. ibuprofen, strongest of all competitive inhibitors tested	2446	
2-Methylmyristoyl-CoA	Homo sapiens	-	2447	
2-Methylmyristoyl-CoA	Rattus norvegicus	-	2447	
2-Methylmyristoyl-CoA	Rattus norvegicus	inhibits reaction with 2-pristanoyl-CoA	2446	
2-Methyloctanoyl-CoA	Homo sapiens	-	2447	
2-Methyloctanoyl-CoA	Rattus norvegicus	-	2447	
2-Methyloctanoyl-CoA	Rattus norvegicus	inhibits reaction with 2-pristanoyl-CoA	2446	
5,5'-Dithiobis(2-nitrobenzoate)	Rattus norvegicus	inhibition is reversed by incubation of the inactivated enzyme with 10 mM dithiothreitol	2446	
Cu ²⁺	Rattus norvegicus	-	2446	
Diethylpyrocarbonate	Rattus norvegicus	-	2446	
Diisopropylphosphofluoridate	Rattus norvegicus	-	2446	
Fe ²⁺	Rattus norvegicus	slight inhibition	2446	
Hg ²⁺	Rattus	-	2446	

		norvegicus			image
More	Rattus norvegicus	no inhibition by iodoacetamide	2446	-	
NEM	Rattus norvegicus	weak	2446		2D-image
Palmitoyl-CoA	Homo sapiens	inhibition is caused by the formation of stable mixed micelles	2447		2D-image
Palmitoyl-CoA	Rattus norvegicus	-	2447		2D-image
Palmitoyl-CoA	Rattus norvegicus	stimulates at low concentrations, inhibits above 0.1 mM	2446		2D-image
thimerosal	Rattus norvegicus	slight	2446		2D-image

ACTIVATING COMPOUND	ORGANISM	COMMENTARY	LITERATURE	IMAGE
Palmitoyl-CoA	Rattus norvegicus	stimulates at low concentrations, inhibits above 0.1 mM	2446	

KM VALUE [mM]	KM VALUE [mM] Maximum	SUBSTRATE	ORGANISM	COMMENTARY	LITERATURE	IMAGE
0.076	-	pristanoyl-CoA	Rattus norvegicus	-	2446	
0.172	-	pristanoyl-CoA	Homo sapiens	-	2447	
0.0316	-	Trihydroxycoprostanyl-CoA	Homo sapiens	-	2447	
0.06	-	Trihydroxycoprostanyl-CoA	Rattus norvegicus	-	2446	

Ki VALUE [mM] Ki VALUE [mM] Maximum INHIBITOR ORGANISM COMMENTARY LITERATURE IMAGE

No entries in this field

TURNOVER NUMBER[1/s]	TURNOVER NUMBER MAXIMUM[1/s]	SUBSTRATE	ORGANISM	COMMENTARY	LITERATURE	IMAGE
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No entries in this field

SPECIFIC ACTIVITY [$\mu\text{mol}/\text{min}/\text{mg}$]	SPECIFIC ACTIVITY MAXIMUM	ORGANISM	COMMENTARY	LITERATURE
additional information	-	Homo sapiens	development of a coupled assay based on the use of pristanoyl-CoA oxidase/peroxidase	2449
additional information	-	Rattus norvegicus	development of a coupled assay based on the use of pristanoyl-CoA oxidase/peroxidase	2449
additional information	-	Rattus norvegicus	development of a very sensitive and convenient radiometric assay	2446

pH OPTIMUM	pH MAXIMUM	ORGANISM	COMMENTARY	LITERATURE
8	-	Homo sapiens	-	2447
7	-	Rattus norvegicus	trihydroxycoprostanyl-CoA	2446
6	-	Rattus norvegicus	pristanoyl-CoA	2446

pH RANGE	pH RANGE MAXIMUM	ORGANISM	COMMENTARY	LITERATURE
6.5	9	Homo sapiens	more than 80% of maximal activity between pH 6.5 and pH 9.0, inactive below pH 5	2447

TEMPERATURE OPTIMUM TEMPERATURE OPTIMUM MAXIMUM ORGANISM COMMENTARY LITERATURE

No entries in this field

TEMPERATURE RANGE TEMPERATURE MAXIMUM ORGANISM COMMENTARY LITERATURE

No entries in this field

SOURCE TISSUE	ORGANISM	COMMENTARY	LITERATURE
adrenal gland	Homo sapiens	weak	2449
cerebellum	Homo sapiens	weak	2449
chorionic villus	Homo sapiens	-	2447
fibroblast	Homo sapiens	-	2447
harderian gland	Homo sapiens	-	2449
heart	Homo sapiens	weak	2449
Hep-G2 cell	Homo sapiens	-	2447
intestinal mucosa	Homo sapiens	-	2449
kidney	Homo sapiens	-	2449
liver	Homo sapiens	-	2447, 2449
liver	Rattus norvegicus	-	2446, 2447, 2449
lung	Homo sapiens	weak	2449
muscle	Homo sapiens	weak	2449
pancreas	Homo sapiens	weak	2449
skin fibroblast	Homo sapiens	-	2447
spleen	Homo sapiens	weak	2449
telencephalon	Homo sapiens	weak	2449
testis	Homo sapiens	weak	2449
thymus	Homo sapiens	weak	2449

LOCALIZATION	ORGANISM	COMMENTARY	GeneOntology No.	LITERATURE
mitochondrion	Homo sapiens	only 10-30% of the activity is found in mitochondria	5739	2447
mitochondrion	Rattus norvegicus	co-distributed exclusively with mitochondrial marker enzymes	5739	2447
peroxisome	Rattus norvegicus	-	5777	649732
peroxisome	Rattus norvegicus	bulk activity	5777	2447

ACCESSION CODE	ENTRY NAME	ORGANISM	NO. OF AA	MOLECULAR WEIGHT[Da]	SOURCE	Sequence
Q9UHK6 pBLAST	AMACR_HUMAN	Homo sapiens	382	42360	Swiss-Prot	Show Sequence

<u>O09174</u> <u>pBLAST</u>	AMACR_MOUSE	Mus musculus	380	41587	Swiss-Prot	<u>Show Sequence</u>
<u>P70473</u> <u>pBLAST</u>	AMACR_RAT	Rattus norvegicus	381	41697	Swiss-Prot	<u>Show Sequence</u>
<u>Q4IYP2</u> <u>pBLAST</u>	Q4IYP2_AZOVI	Azotobacter vinelandii AvOP	397	42454	TrEMBL	<u>Show Sequence</u>
<u>Q4LND9</u> <u>pBLAST</u>	Q4LND9_9BURK	Burkholderia cenocepacia HI2424	455	49064	TrEMBL	<u>Show Sequence</u>
<u>Q4LQP6</u> <u>pBLAST</u>	Q4LQP6_9BURK	Burkholderia cenocepacia HI2424	350	36615	TrEMBL	<u>Show Sequence</u>
<u>Q4LWN5</u> <u>pBLAST</u>	Q4LWN5_9BURK	Burkholderia cenocepacia HI2424	406	43669	TrEMBL	<u>Show Sequence</u>
<u>Q4LXS2</u> <u>pBLAST</u>	Q4LXS2_9BURK	Burkholderia cenocepacia HI2424	406	43786	TrEMBL	<u>Show Sequence</u>
<u>Q4NIB3</u> <u>pBLAST</u>	Q4NIB3_9MICC	Arthrobacter sp. FB24	419	45712	TrEMBL	<u>Show Sequence</u>
<u>Q4NR64</u> <u>pBLAST</u>	Q4NR64_9DELT	Anaeromyxobacter dehalogenans 2CP-C	391	40575	TrEMBL	<u>Show Sequence</u>
<u>Q4AQK8</u> <u>pBLAST</u>	Q4AQK8_9BURK	Polaromonas sp. JS666	433	45750	TrEMBL	<u>Show Sequence</u>
<u>Q4ASU3</u> <u>pBLAST</u>	Q4ASU3_9BURK	Polaromonas sp. JS666	407	43920	TrEMBL	<u>Show Sequence</u>
<u>Q4AVI5</u> <u>pBLAST</u>	Q4AVI5_9BURK	Polaromonas sp. JS666	416	45848	TrEMBL	<u>Show Sequence</u>
<u>Q4B2Y0</u> <u>pBLAST</u>	Q4B2Y0_9BURK	Polaromonas sp. JS666	407	43807	TrEMBL	<u>Show Sequence</u>
<u>Q4B520</u> <u>pBLAST</u>	Q4B520_9BURK	Polaromonas sp. JS666	416	44626	TrEMBL	<u>Show Sequence</u>
<u>Q447U6</u> <u>pBLAST</u>	Q447U6_SOLUS	Solibacter usitatus Ellin6076	403	44029	TrEMBL	<u>Show Sequence</u>
<u>Q422R9</u> <u>pBLAST</u>	Q422R9_DESHA	Desulfitobacterium hafniense DCB-2	355	39734	TrEMBL	<u>Show Sequence</u>
<u>Q3VZH3</u> <u>pBLAST</u>	Q3VZH3_9ACTO	Frankia sp. EAN1pec	423	44956	TrEMBL	<u>Show Sequence</u>
<u>Q3VZL8</u> <u>pBLAST</u>	Q3VZL8_9ACTO	Frankia sp. EAN1pec	379	40254	TrEMBL	<u>Show Sequence</u>
<u>Q3W154</u> <u>pBLAST</u>	Q3W154_9ACTO	Frankia sp. EAN1pec	378	40088	TrEMBL	<u>Show Sequence</u>
<u>Q3W4K6</u> <u>pBLAST</u>	Q3W4K6_9ACTO	Frankia sp. EAN1pec	369	39541	TrEMBL	<u>Show Sequence</u>
<u>Q3W562</u> <u>pBLAST</u>	Q3W562_9ACTO	Frankia sp. EAN1pec	396	43121	TrEMBL	<u>Show Sequence</u>
<u>Q3W5F2</u> <u>pBLAST</u>	Q3W5F2_9ACTO	Frankia sp. EAN1pec	451	48468	TrEMBL	<u>Show Sequence</u>
<u>Q3WFQ7</u> <u>pBLAST</u>	Q3WFQ7_9ACTO	Frankia sp. EAN1pec	402	43090	TrEMBL	<u>Show Sequence</u>
<u>Q3WFX1</u> <u>pBLAST</u>	Q3WFX1_9ACTO	Frankia sp. EAN1pec	389	41842	TrEMBL	<u>Show Sequence</u>
<u>Q3WHJ3</u> <u>pBLAST</u>	Q3WHJ3_9ACTO	Frankia sp. EAN1pec	462	49208	TrEMBL	<u>Show Sequence</u>
<u>Q3WJ86</u> <u>pBLAST</u>	Q3WJ86_9ACTO	Frankia sp. EAN1pec	771	81365	TrEMBL	<u>Show Sequence</u>
<u>Q3WTP8</u>	Q3WTP8_9RHIZ	Mesorhizobium sp. BNC1	419	45059	TrEMBL	<u>Show Sequence</u>

<u>pBLAST</u>						<u>Sequence</u>
<u>Q3WTR2</u>	Q3WTR2_9RHIZ	Mesorhizobium sp. BNC1	364	38783	TrEMBL	Show Sequence
<u>pBLAST</u>						
<u>Q3WXX8</u>	Q3WXX8_9RHIZ	Mesorhizobium sp. BNC1	378	40584	TrEMBL	Show Sequence
<u>pBLAST</u>						
<u>Q3X096</u>	Q3X096_9ACTN	Rubrobacter xylanophilus DSM 9941	404	44338	TrEMBL	Show Sequence
<u>pBLAST</u>						
<u>Q3X5E1</u>	Q3X5E1_9ACTN	Rubrobacter xylanophilus DSM 9941	395	43719	TrEMBL	Show Sequence
<u>pBLAST</u>						
<u>Q3X5K5</u>	Q3X5K5_9ACTN	Rubrobacter xylanophilus DSM 9941	414	45231	TrEMBL	Show Sequence
<u>pBLAST</u>						
<u>Q3MVD3</u>	Q3MVD3_9DELT	Syntrophobacter fumaroxidans MPOB	391	42948	TrEMBL	Show Sequence
<u>pBLAST</u>						
<u>Q3QQ94</u>	Q3QQ94_9RHOB	Silicibacter sp. TM1040	373	40180	TrEMBL	Show Sequence
<u>pBLAST</u>						
<u>Q3QTP0</u>	Q3QTP0_9RHOB	Silicibacter sp. TM1040	395	42380	TrEMBL	Show Sequence
<u>pBLAST</u>						
<u>Q3FMR0</u>	Q3FMR0_9BURK	Rhodoferax ferrireducens DSM 15236	362	38569	TrEMBL	Show Sequence
<u>pBLAST</u>						
<u>Q3FP81</u>	Q3FP81_9BURK	Rhodoferax ferrireducens DSM 15236	418	44695	TrEMBL	Show Sequence
<u>pBLAST</u>						
<u>Q3FU66</u>	Q3FU66_9BURK	Rhodoferax ferrireducens DSM 15236	387	41780	TrEMBL	Show Sequence
<u>pBLAST</u>						
<u>Q3GL65</u>	Q3GL65_9GAMM	Psychrobacter cryohalolentis K5	352	38399	TrEMBL	Show Sequence
<u>pBLAST</u>						
<u>Q3GNY3</u>	Q3GNY3_9GAMM	Psychrobacter cryohalolentis K5	423	45301	TrEMBL	Show Sequence
<u>pBLAST</u>						
<u>Q3K8D2</u>	Q3K8D2_PSEFL	Pseudomonas fluorescens PfO-1	393	42243	TrEMBL	Show Sequence
<u>pBLAST</u>						
<u>Q391W0</u>	Q391W0_9BURK	Burkholderia sp. 383	388	41422	TrEMBL	Show Sequence
<u>pBLAST</u>						
<u>Q392M2</u>	Q392M2_9BURK	Burkholderia sp. 383	381	40921	TrEMBL	Show Sequence
<u>pBLAST</u>						
<u>Q39B91</u>	Q39B91_9BURK	Burkholderia sp. 383	350	36647	TrEMBL	Show Sequence
<u>pBLAST</u>						
<u>Q39DK7</u>	Q39DK7_9BURK	Burkholderia sp. 383	463	49229	TrEMBL	Show Sequence
<u>pBLAST</u>						
<u>Q39LX9</u>	Q39LX9_9BURK	Burkholderia sp. 383	384	40897	TrEMBL	Show Sequence
<u>pBLAST</u>						
<u>Q39MI0</u>	Q39MI0_9BURK	Burkholderia sp. 383	388	41225	TrEMBL	Show Sequence
<u>pBLAST</u>						
<u>Q39MT5</u>	Q39MT5_9BURK	Burkholderia sp. 383	350	37383	TrEMBL	Show Sequence
<u>pBLAST</u>						
<u>Q39MW4</u>	Q39MW4_9BURK	Burkholderia sp. 383	386	41428	TrEMBL	Show Sequence
<u>pBLAST</u>						
<u>Q39N02</u>	Q39N02_9BURK	Burkholderia sp. 383	369	38590	TrEMBL	Show Sequence
<u>pBLAST</u>						
<u>Q3CNG3</u>	Q3CNG3_ALTAT	Pseudoalteromonas atlantica T6c	386	42619	TrEMBL	Show Sequence
<u>pBLAST</u>						
<u>Q8F1J1</u>	Q8F1J1_LEPIN	Leptospira interrogans	390	43625	TrEMBL	Show Sequence
<u>pBLAST</u>						
<u>Q89XH6</u>	Q89XH6_BRAJA	Bradyrhizobium japonicum	388	41545	TrEMBL	Show Sequence
<u>pBLAST</u>						

O06543 pBLAST	O06543_MYCTU	Mycobacterium tuberculosis	360	38685	TrEMBL	Show Sequence
Q6FBN2 pBLAST	Q6FBN2_ACIAD	Acinetobacter sp. (strain ADP1)	407	45097	TrEMBL	Show Sequence
Q6FBN5 pBLAST	Q6FBN5_ACIAD	Acinetobacter sp. (strain ADP1)	405	44587	TrEMBL	Show Sequence
Q7U0J6 pBLAST	Q7U0J6_MYCBO	Mycobacterium bovis	360	38685	TrEMBL	Show Sequence
Q8YB25 pBLAST	Q8YB25_BRUME	Brucella melitensis	405	43553	TrEMBL	Show Sequence
Q8YB81 pBLAST	Q8YB81_BRUME	Brucella melitensis	415	45073	TrEMBL	Show Sequence

PDB ORGANISM

[1X74](#), [download](#) Mycobacterium tuberculosis

MOLECULAR WEIGHT	MOLECULAR WEIGHT MAXIMUM	ORGANISM	COMMENTARY	LITERATURE
75000	-	Mycobacterium tuberculosis	dynamic light-scattering measurement	649225
47700	-	Homo sapiens	gel filtration	2447
44700	-	Rattus norvegicus	gel filtration	2446

SUBUNITS ORGANISM COMMENTARY LITERATURE

Dimer Mycobacterium tuberculosis 2 * 39000, SDS-PAGE [649225](#)Monomer Homo sapiens 1 * 47100, SDS-PAGE [2447](#)Monomer Rattus norvegicus - [2447](#)Monomer Rattus norvegicus 1 * 44900, SDS-PAGE [2446](#)

POSTTRANSLATIONAL MODIFICATION ORGANISM COMMENTARY LITERATURE

No entries in this field

Crystallization/COMMENTARY	ORGANISM	LITERATURE
hanging-drop vapour-diffusion method, the best crystals grow in 1.26 M ammonium phosphate, pH 7.0 using a protein concentration of 24 mg/ml	Mycobacterium tuberculosis	649225

pH STABILITY pH STABILITY MAXIMUM ORGANISM COMMENTARY LITERATURE

No entries in this field

TEMPERATURE STABILITY	TEMPERATURE STABILITY MAXIMUM	ORGANISM	COMMENTARY	LITERATURE
50	-	Homo sapiens	half-life: 15 min	2447
35	40	Homo sapiens	slow loss of activity	2447

GENERAL STABILITY ORGANISM LITERATURE

No entries in this field

ORGANIC SOLVENT ORGANISM COMMENTARY LITERATURE

No entries in this field

OXIDATION STABILITY ORGANISM LITERATURE

No entries in this field

STORAGE STABILITY ORGANISM LITERATURE

No entries in this field

Purification/COMMENTARY	ORGANISM	LITERATURE
-	Homo sapiens	2447
-	Rattus norvegicus	2446, 2448
-	Mycobacterium tuberculosis	649225

Cloned/COMMENTARY	ORGANISM	LITERATURE
-	Mus musculus	2448
expression in Escherichia coli	Rattus norvegicus	2448

ENGINEERING ORGANISM COMMENTARY LITERATURE

No entries in this field

Renatured/COMMENTARY ORGANISM LITERATURE

No entries in this field

APPLICATION	ORGANISM	COMMENTARY	LITERATURE
medicine	Homo sapiens	the activity of EC 5.1.99.4 may prove to be a valuable parameter for the prenatal diagnosis of general defects of peroxisome biogenesis such as Zellweger syndrome	2447

DISEASE TITLE OF PUBLICATION LINK TO PUBMED

No entries in this field

REF.	AUTHORS	TITLE	JOURNAL	VOL.	PAGES	YEAR	ORGANISM	COMMENTARY	LINK TO PUBMED
2446	Schmitz, W.; Fingerhut, R.; Conzelmann, E.	Purification and properties of an alpha-methylacyl-CoA racemase from rat liver	Eur. J. Biochem.	222	313-323	1994	Rattus norvegicus	c	● PubMe
2447	Schmitz, W.; Albers, C.; Fingerhut, R.; Conzelmann, E.	Purification and characterization of an alpha-methylacyl-CoA racemase from human liver	Eur. J. Biochem.	231	815-822	1995	Homo sapiens, c Rattus norvegicus	c	● PubMe
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LINKS TO OTHER DATABASES (specific for EC-Number 5.1.99.4)

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